2008 REPORT TO CONSUMERS ON

WATER QUALITY

CITY OF MORGAN HILL • CONSUMER CONFIDENCE REPORT

Our Goal:

Meet or Exceed Federal and State Regulations

The City of Morgan Hill is committed to providing the community a safe, reliable supply of excellent quality drinking water that meets or exceeds Federal and State regulations. Again in 2008 we met or exceeded every water quality standard without a single violation.

This report gives information about the quality of water provided in 2008. It describes where your water comes from, what it contains and how it compares to State standards.

This report contains information regarding testing for perchlorate levels in the City's water wells. Other perchlorate information can be found at www.valleywater.org on the Santa Clara Valley Water District's web site.

Share This Report

Landlords, businesses, schools, hospitals and other groups are encouraged to share this important water quality information with water users at their locations who are not billed customers of the City of Morgan Hill and therefore do not receive this report directly.

Este informe contiene informacion muy importante sobre su agua para beber. Traduzcalo, o hable con alguien que lo entienda bien.

This report contains important information about your community's water quality. If necessary, please have it translated, or speak with a friend who understands it well.

The City's Perchlorate Challenge

Perchlorate contamination of drinking water supplies in the South Valley, including water supplied by the City of Morgan Hill, has been an ongoing concern of City government and all local residents and businesses. Prior to the adoption of a maximum contaminant level "MCL" by the Environmental Protection Agency in October 2007, the City aggressively responded to the discovery of perchlorate in the South Valley aquifer by taking the following actions:

- Maintain a Perchlorate Removal systems on Tennant Well to provide residents with an adequate supply of quality drinking water;
- Testing City wells for the presence of perchlorate in excess of EPA or DPH requirements;
- Turning off or treating any City well that tests above 6 parts per billion (ppb) the adopted MCL;
- Cooperating with the Santa Clara Valley Water District, Regional Water Quality Control Board (SWRCB), and State Department of Public Health on approaches to addressing perchlorate; and,
- Pursuing recovery of the City's costs associated with perchlorate contamination.

In 2004, the State of California published a final Public Health Goal (PHG) of 6 ppb for perchlorate. A PHG is a level of a contaminant in drinking water that does not pose a significant short-term or long-term health risk. Perchlorate can limit the uptake of iodide, an essential nutrient, by the thyroid gland. Research has shown that reduced levels of iodide in the thyroid can disrupt thyroid hormones that regulate metabolism and growth. For additional information on perchlorate, including test results, visit the City's web site at www.morganhill.ca.gov, For the status of the State's groundwater cleanup efforts, visit the SWRCB web site at www.swrcb.ca.gov.

Perchlorate Surcharge Imposed. On April 1, 2004, a 5% surcharge on water usage fees was applied to the water bills of every City water user to pay for perchorate removal and the cost associated with resolving the perchlorate problem. The surcharge was increased to 10% in 2005 and to 15% in 2006 to meet the programs funding demand. On July 1, 2008, the perchlorate surcharge was reduced to 10%. Perchlorate surcharge revenues are accounted for separately and spent only on perchlorate-related costs.

The proposed 2009/10 operating budget requirements for perchlorate related costs are about the same as 2008/09. However, the draft 2009/10 Budget recommends a reduction of the perchlorate surcharge from 10% to 3% beginning July 1, 2009 because previous accumulate perchlorate costs have been paid. The City continues its efforts to resolve the perchlorate issue and is making provision in the 2009/10 budget to respond to the upcoming year's challenges.

The need for future surcharges will be evaluated annually. Any amount determined to be in excess of the amount needed shall be credited to customers. In addition, any repayments the City receives from any source to compensate the City for perchlorate-related costs will be credited to the perchlorate account in the Water Fund and shall also be credited to customers if they are determined to be in excess of the City's perchlorate-related costs.

A Word About Chemicals and Organisms

Here is a brief description of chemicals and organisms, and how the City of Morgan Hill monitors, tests, and treats for them:

Methyl Tertiary-Butyl Ether (MTBE)

Added to gasoline either seasonally or year round in many parts of the United States to increase octane levels and reduce carbon monoxide and ozone levels in the air. In California, it has been added to gasoline since January 1996. The City of Morgan Hill has tested quarterly for MTBE in its 16 wells. No MTBE has been detected.

Lead and Copper Testing

In 1991, the EPA adopted the Lead and Copper Rule which requires all cities, including Morgan Hill, to perform lead and copper testing. The City's public water system does not have detectable levels of lead and copper; however these metals may leach into the water from home plumbing.

In June of 1997 the City completed Lead and Copper testing from inside homes under the guidance of the Department of Public Health. Results showed that the Copper levels were below the Federal Action Level of 1300 parts per billion (ppb), and the Lead levels were below the Federal Action Level of 15 parts per billion (ppb).

The City is on a three year cycle for testing of Lead and Copper determined by the primary testing performed at the first inception of the Lead and Copper Rule. The City has completed its 2006 tri-annual round of sampling and the sample results remain under Federal Action Levels for Lead and Copper. We will retest these levels again in 2009.

Nitrates

Nitrate in drinking water at levels above 45 mg/l is a health risk for infants below the age of six months. High nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin.

See "CHEMICALS", page 4

Water Sources:

Morgan Hill is located in South Santa Clara County, situated between the Coyote and Llagas underground aquifers. These aquifers are the source of Morgan Hill's water supply.

The City currently operates 16 deep water wells throughout the city. In 2008, these wells supplied 2,792 million gallons of water to approximately 12,000 Morgan Hill homes and businesses. The water produced by these wells is disinfected with chlorine to protect against microbial contaminants.

An assessment of the drinking water sources for the City of Morgan Hill was completed in September of 2002. The ground-water source is considered to be most vulnerable to the following activities associated with contaminants detected in ground water: animal feeding operations, low density septic systems, irrigated crops, grazing and animal operations, agricultural/irrigation wells and animal feeding operations (occurrence of nitrate in groundwater).

In addition, the groundwater source is considered most vulnerable to these activities for which no associated contaminant has been detected: gas stations, dry cleaners, animal feeding operations, repair shops, sewer collections systems and pesticide/fertilizer/petroleum storage.

A copy of the complete assessment is available at the Department of Public Health, Drinking Water Field Operations Branch at **850 Marina Bay Parkway, Bldg. P, 2nd Floor, Room 458, Richmond, California**, and the City of Morgan Hill Public Works Department at 100 Edes Court.

Water Quality Data

The table in this report lists all the drinking water contaminants detected during the test cycle up to December 31, 2008.

To ensure that tap water is safe to drink, the California Department of Public Health (DPH) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Morgan Hill's water is treated in accordance with the Department's regulations.

The DHS Food and Drug Branch regulations establish limits for contaminants in bottled water; these limits provide the same protection for the public water supply. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk.

See "WATER SAMPLING", page 4

TERMS & ABBREVIATIONS USED IN THE DATA TABLES →

- **Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U. S. Environmental Protection Agency
- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.
- **Regulatory Action Level (AL):** The concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow
- **n/a:** not applicable
- **ns:** no standard
- **nd:** not detectable at testing limit
- **cu:** Color Unit (a measure of color in water)
- **ppb:** parts per billion or micrograms per liter
- **ug/L:** micrograms per liter
- **ppm:** parts per million or milligrams per liter
- **mg/L:** milligrams per liter
- **pCi/l:** picocuries per liter (a measure of radiation)
- **MFL:** Million Fibers per Liter, with a fiber length greater than 10 micrometers
- **grains per gallon:** the measure of the concentration of a solution.
- **TON:** Threshold Odor Number (a measure of the odor associated with water)
- **umhos/cm:** the measure of the dissolved inorganic salt content

Contaminants that may be present in source water before we treat it.

- ***Microbial contaminants***, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- ***Inorganic contaminants***, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- ***Pesticides and herbicides***, which may come from a variety of sources such as agricultural and residential uses.
- ***Radioactive contaminants***, which are naturally occurring.
- ***Organic chemical contaminants***, including synthetic and volatile organic

Water Quality Statement

For the calendar year 2008, your tap water met all U.S. Environmental Protection Agency (USEPA) and state drinking water health standards. The City of Morgan Hill vigilantly safeguards your water supply, and once again we are proud to report that the City's system has not violated any California Department of Health Standards.

PARAMETER	DATE TESTED	UNITS	MCL	PHG (MCLG) [MRDLG]	GROUNDWATER DETECTION		RANGE OF	TYPICAL SOURCE OF CONTAMINANT	EXCEEDED MCL?
					LOW	HIGH	AVG.		
PRIMARY STANDARDS - MANDATED HEALTH RELATED STANDARDS									
CLARITY									
TURBIDITY	2008	NTU	5	N/A	ND	2.8	0.13	SOIL RUNOFF	NO
DISINFECTANTS/DISINFECTION BY-PRODUCTS RULE									
TOTAL TRIHALOMETHANES	QUARTERLY 2008	ppb	80	N/A	ND	9.4	2.2	BY-PRODUCT OF DRINKING WATER CHLORINATION	NO
HALOCETIC ACIDS (HAA5)	QUARTERLY 2008	ppb	60	N/A	ND	2.3	0.2	BY-PRODUCT OF DRINKING WATER DISINFECTION	NO
CHLORINE RESIDUAL	QUARTERLY 2008	ppm	4.0	[4.0]	0.26	0.37	0.3	DRINKING WATER DISINFECTANT ADDED FOR TREATMENT	NO
INORGANIC CHEMICALS									
ASBESTOS	2004	MFL	7	(7)	ND	0.32	0.02	INTERNAL CORROSION OF ASBESTOS CEMENT WATER MAINS; EROSION OF NATURAL DEPOSITS	NO
BARIUM	2007	mg/l	1	(2)	0.05	0.14	0.08	DISCHARGES OF OIL DRILLING WASTES AND FROM METAL REFINERIES; EROSION OF NATURAL DEPOSITS	NO
FLUORIDE	2007	mg/l	2	1	ND	ND	ND	EROSION OF NATURAL DEPOSITS; WATER ADDITIVE THAT PROMOTES STRONG TEETH; DISCHARGE FROM FERTILIZER AND ALUMINUM FACTORIES	NO
NITRATE (as NO3)	2008	mg/L	45	45	10	35	27	RUNOFF AND LEACHING FROM FERTILIZER USE; LEACHING FROM SEPTIC TANKS AND SEWAGE; EROSION OF NATURAL DEPOSITS	NO
PERCHLORATE	MONTHLY 2008	ppb	6	6	ND	5.2	ND	MANUFACTURING USE OF LUBRICATING OILS, FABRICS, DYES, RUBBER, PAINTS, FIREWORKS, AND CERTAIN FERTILIZERS	NO
RADIOACTIVE CONTAMINANTS									
GROSS ALPHA ACTIVITY	QUARTERLY 2005	pCi/1	15	N/A	ND	0.94	0.29	EROSION OF NATURAL DEPOSITS	NO
RADIUM 228	QUARTERLY 2005	pCi/1	5	0.19	ND	0.12	0.02	NATURALLY OCCURING - FORMED BY DECAY OF PRIMORDIAL RADIONUCLIEDES IN EARTH'S CRUST	NO
SECONDARY STANDARDS - AESTHETIC STANDARDS									
CHLORIDE	2007	mg/L	500	N/A	28	69	47	RUNOFF/LEACHING FROM NATURAL DEPOSITS; SEAWATER INFLUENCE	NO
SULFATE	2007	mg/L	500	N/A	28	47	38.4	RUNOFF/LEACHING FROM NATURAL DEPOSITS; INDUSTRIAL WASTES	NO
TOTAL DISSOLVED SOLIDS	2007	mg/L	1000	N/A	280	580	367	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NO
IRON	2007	ug/L	300	N/A	ND	140	15.6	LEACHING FROM NATURAL DEPOSITS; INDUSTRIAL WASTES	NO
SPECIFIC CONDUCTANCE (E.C.)	2007	umho/cm	1,600	N/A	490	700	585	SUBSTANCES THAT FORM IONS WHEN IN WATER; SEA WATER INFLUENCES	NO
COLOR	2007	C	15	N/A	ND	12	3.5	NATURALLY-OCCURING ORGANIC MATERIALS	NO
ODOR-THRESHOLD	2007	TON	3	N/A	ND	ND	ND	NATURALLY-OCCURING ORGANIC MATERIALS	NO
SODIUM	2007	ppm	NS	N/A	18	36	27	"SODIUM" REFERS TO THE SALT PRESENT IN THE WATER AND IS GENERALLY NATURALLY-OCCURRING	NS
LIST OF ADDITIONAL CONSTITUENTS ANALYZED									
pH	2007	unit	NS		7.2	7.6	7.4	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NS
HARDNESS	2007	ppm	NS		200	300	240	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NS
HARDNESS	2007	GRAINS/GAL	NS		12	18	14	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NS

PARAMETER							
LEAD AND COPPER	DATE TESTED	UNITS	ACTION LEVEL	PHG (MCLG)	NUMBER OF SITES SAMPLED	HOUSEHOLD RESULTS 90th PERCENTILE	TYPICAL SOURCE OF CONTAMINATION	ACTION LEVEL EXCEEDED?
LEAD	Aug 2006	ppb	15	2	35	4.3 ppb	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS	NO
COPPER	Aug 2006	ppm	1.3	0.3	35	0.56 ppm	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS	NO

PARAMETER									
UNREGULATED CHEMICALS	DATE TESTED	UNITS	NOTIFICATION LEVEL	PHG (MCLG)	GROUNDWATER DETECTION		RANGE OF	TYPICAL SOURCE OF CONTAMINATION	NOTIFICA-TION LEVEL EXCEEDED?
					LOW	HIGH	AVG.		
RADON	2000	pCi/L	0	NS	459	828	597		NS
CHROMIUM VI	2002	ppb	NS	NS	ND	4.0	1.8		NS
VANADIUM	2003	ppb	50	NS	ND	6.0	1.0		NO
BORON	2003	ppb	1,000	NS	ND	100	32		NO

Additional information about the content of this report (and additional copies) can be obtained by calling the Public Works Department at (408) 776-7333.

"CHEMICALS", from page 2

High nitrate levels may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. Nitrate levels may rise quickly in short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider, or choose to use bottled water for mixing formula and juice for your baby. If you are pregnant, you should drink bottled water.

The City's water supply is below the MCL for nitrates. In 2008, the City performed 306 nitrate analyses alone to ensure a safe water supply.

Unregulated Contaminants

The City proactively monitors for unregulated contaminants. This helps the EPA and the California Department of Public Health determine where certain contaminants occur, and whether the contaminants need to be regulated.

Perchlorate

On October 18, 2007, the Environmental Protection Agency "EPA" established the "maximum contaminant level" (MCL) for perchlorate at 6 parts-per-billion "ppb". The EPA determined that at this level, there was minimal health risk to individuals drinking the water for a lifetime of use including at-risk populations such as pregnant women and infants. The State of California Department of Public Health "DPH" adopted this level and the City of Morgan Hill amended its perchlorate treatment rule to be consistent with the State DPH protocol in most instances. However, the City continues to take extra precautions that exceed EPA and DPH legal requirements with regards to monitoring perchlorate levels in certain wells. City wells that have detectable levels of perchlorate at the state detection limit range "DLR" are tested monthly for perchlorate contamination – well beyond the State testing requirement of quarterly in regulations. Also well beyond the State requirements, we test all city wells at least annually.

Radon

The City tested its source waters for radon on a quarterly basis in 2005. Radon is a radioactive gas found throughout the U.S. that you can't see, taste, or smell. It can move up through ground and into a home through cracks and holes in the foundation, and can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities.

Compared to Radon entering the home through the soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause an increased risk of stomach cancer.

If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your State radon program, or call EPA's Radon Hotline (800-SOS-RADON).

Radioactive Contamination

These contaminants can be naturally occurring or may be the result of oil and gas production and mining activities.

"WATER SAMPLING", from page 2

Unless otherwise noted, the data presented in this table is from testing done over the period January 1-December 31, 2008. The State allows the City to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Thus, some of the data – though representative of the water quality – is more than a year old.

Water Sampling and Testing:

The annual water sampling required by the State Department of Public Health consists of Bacteria (520 samples), Nitrate (306 samples), Turbidity (52 samples), Trihalomethenes (64 samples), and (HAA5) Halocetic Acids (64 samples), for a total of 945 samples from the 40 separate sample stations and source facilities located throughout the City's water distribution system.

Other Information:

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at-risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Water System Improvements

The City's water system consists of 16 production wells, 115 miles of water main, 9 pumping stations, and 12 reservoirs. This complex, interrelated system requires 24-hour monitoring and an extensive program of ongoing maintenance. Additionally, a 5-year program of capital improvements must be constantly updated to plan and fund new capacity and the replacement of aging infrastructure. The past year was used to plan and design several projects that will be completed next fiscal year. These water system planned improvements include:

- Diana Well 1 Replacement project: Replace an old existing well to meet current specifications and reclaim lost production
- Glen Ayre Booster: Upgrade Facility
- Water Main Replacement Project: Replace older water mains in the Downtown area to improve fire flow and water service reliability